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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,179	11/07/2000	Satoshi Nakajima	41020.P003	1119

25943 7590 12/06/2004

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EXAMINER

TRAN, PHILIP B

ART UNIT PAPER NUMBER

2155

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/708,179

Applicant(s)

NAKAJIMA, SATOSHI

Examiner

Philip B Tran

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03/07/2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2000 and 11 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2 and 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Murashita, EP 0896284 A1.

Regarding claim 1, Murashita teaches a method comprising:

receiving a plurality of constituting elements of a data structure (= receiving SGML document with DTD), determining occurrence frequency of each unique constituting element in said data structure (= calculating frequency of occurrence of each tag in the document), assigning a cookie representation to each of said unique constituting elements based at least in part on the occurrence frequencies of said unique constituting elements (= assigning a code according to the counting to the tag to create a dictionary of tags), and transmitting said data structure implicitly in a substantively equivalent form that allows a receiver of said data structure in said substantively equivalent form to be able to reconstitute the data structure using said occurrence frequency based cookie representations (= transmitting code information in compressed form to the decoding side wherein the data structure is decompressed based on the frequency of occurrence of a tag) [see Abstract and Page 19, Line 42 to Page 20, Line 52].

Regarding claims 2-5, Murashita further teaches said determining and assigning comprises assigning an initial cookie representation to each unique constituting element as the constituting elements are received (= assigning a code according to the counting to the tag to create a dictionary of tags), and tracking occurrence frequencies of the unique constituting elements (= calculating frequency of occurrence of each tag in the document), and upon receipt of all constituting elements of the data structure, re-assigning a final cookie representation for each of the unique constituting elements based on the occurrence frequencies of the unique constituting elements (= creating a dictionary of tags having the same code contents as the coding side based on the frequency of occurrence of each tag), ordering said unique constituting elements based on their occurrence frequencies, storing said constituting elements of the data structure as they are received, using said initial cookie representations, and subsequently replacing the stored initial cookie representations with the final cookie representations, and said transmitting comprises transmitting said constituting elements of said data structure using said final cookie representations, transmitting a list of said unique constituting elements in the order of their occurrence frequencies to allow the receiver to infer the corresponding final cookie representations of the unique constituting elements (= transmitting code information in compressed form to the decoding side wherein the data structure is decompressed based on the frequency of occurrence of a tag) [see Figs. 2-14 and Page 20, Line 1 to Page 21, Line 36].

Regarding claim 6, Murashita further teaches the cookie representations are numeric in form, with the cookie representations of the 128 most frequently occurred unique constituting elements having a size of one byte each, and the cookie representations of the next 32,640 most frequently occurred unique constituting elements having a size of two bytes each (= numeric form) [see Fig. 13].

Regarding claim 7, Murashita further teaches said data structure is an XML data structure (= SGML data structure), and said constituting elements comprise tag names, attribute names and attribute values (= tags, character strings and codes) [see Figs. 13 & 32-33].

Regarding claim 8, Murashita teaches a method comprising receiving a plurality of unique constituting elements of a data structure transmitted in a pre-determined manner (= receiving SGML document with DTD), inferring a plurality of corresponding cookie representations for the received unique constituting elements in accordance with their manner of transmissions under the pre-determined manner of transmission, and receiving the constituting elements of the data structure in a representative form (= assigning a code according to the counting to the tag to create a dictionary of tags and transmitting code information in compressed form to the decoding side wherein the data structure is decompressed based on the frequency of occurrence of a tag) [see Abstract and Page 19, Line 42 to Page 20, Line 52].

Regarding claims 9 and 11, Murashita further teaches said inferring comprises inferring the plurality of corresponding cookie representations based on the order the unique constituting elements are transmitted, and reconstituting the constituting elements of the data structure, received in said representative form, based on the inferred cookie representations (= creating a dictionary of tags having the same code contents as the coding side based on the frequency of occurrence of each tag and transmitting code information in compressed form to the decoding side wherein the data structure is decompressed based on the frequency of occurrence of a tag) [see Figs. 2-14 and Page 20, Line 1 to Page 21, Line 36].

Regarding claim 10, Murashita further teaches said inferring comprises inferring a unique one-byte numeric representation for each of the first 128 unique constituting elements transmitted, and a unique two-bytes representation for each of the next 32,460 unique constituting elements transmitted (= numeric form) [see Fig. 13].

Regarding claim 12, Murashita further teaches said data structure is an XML data structure (= SGML data structure), and said constituting elements comprise tag names, attribute names and attribute values (= tags, character strings and codes) [see Figs. 13 & 32-33].

Claims 13-19 are rejected under the same rationale set forth above to claims 1-7, respectively.

Regarding claim 20, Murashita further teaches said apparatus is a selected one of a wireless mobile phone, a palm sized personal digital assistant, a notebook sized computer, a desktop computer, a set top box and a server [see Fig. 1].

Claims 21-25 are rejected under the same rationale set forth above to claims 8-12, respectively.

Regarding claim 26, Murashita further teaches said apparatus is a selected one of a wireless mobile phone, a palm sized personal digital assistant, a notebook sized computer, a desktop computer, a set top box and a server [see Fig. 1].

***Other References Cited***

3. The following references cited by the examiner but not relied upon are considered pertinent to applicant's disclosure.

A) Murashita et al, U.S. Pat. No. 5,854,597.

B) Yahagi et al, U.S. Pat. No. 6,094,634.

C) Satoh et al, U.S. Pat. No. 5,801,648.

D) Domyo et al, U.S. Pat. No. 5,872,530.

E) Hind et al, U.S. Pat. No. 6,635,088.

4. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS, OR THIRTY DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (571) 272-3991. The Group fax phone number is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam, can be reached on (571) 272-3978.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

*Philip Tran*  
Philip B. Tran  
Art Unit 2155  
November 23, 2004